VAISALA

USER GUIDE

viewLinc 4.1

Vaisala Veriteq viewLinc Software

M211519EN-A

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Technical Support

For technical support in North America, please call 1-866-861-3388, or for customers outside North America, see “Getting Help” on page 6.

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Contents

Chapter 1: Getting Started 1
Overview 2
Logging in to viewLinc 3
What's New in viewLinc 5
Getting Help 6

Chapter 2: Locations 9
About Locations 10
What is a Location? 10
Understanding the Locations Screen 11
Understanding the Options Dropdown Menu in Locations . 13
Understanding The Tabs in Locations 14
Building a Trend with the Trend Tab 15
Understanding the Dropdown Menus and Buttons in the Locations Tabs 16
Opening Large Popup Trend Views 18
Real-Time Graphs 19
Reading Graphs in Popup Trend View 20
Viewing Graph Detail in Large Popup Trend View 21
Acknowledging Alarms from Large Popup Trend View 21

Chapter 3: Alarms 23
About Alarms 24
What Happens When an Alarm is Triggered? 25
Threshold Alarms 26
Acknowledging Alarms 27
Pausing Alarms 28

Chapter 4: Events 31
Viewing Events 32
Adding Comments to Events 33
Adding Custom Events 34

Printing Event Logs 34
Exporting Event Logs 35

Chapter 5: Reports 37
About Reports 38
Generating Historical Data Reports 38
Generating Alarm History Reports 39
Generating Location History Reports 41

Chapter 6: Mobile UI 45
About the Mobile UI 46
Logging in to the the Mobile UI 46
Working with the Mobile UI 47
Acknowledging Alarms with the Mobile UI 50

Index 53

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Chapter 1: Getting Started

This section includes:

- Overview of the Vaisala Veriteq Continuous Monitoring System (CMS)
- Logging in to viewLinc from an Internet Browser to Monitor Conditions
- First Steps in viewLinc
- What's New in viewLinc
- Getting Help

Overview

Welcome to viewLinc 4.1, a key element in the Vaisala Veriteq Continuous Monitoring System (CMS). Using viewLinc you can easily monitor device readings locally on a PC or across a network using a supported version of Microsoft® Internet Explorer® or from mobile devices like the iPhone®, Google Android®, or Blackberry®. Your administrator will determine the best way to install viewLinc for your needs.

With viewLinc 4.1, you can:

- Monitor remote conditions in multiple languages from multiple devices from a local or remote PC desktop
- View real-time data in a customizable graphical format
- Generate historical data and alarm reports
- Receive visual or email alarms when conditions you are monitoring are out of compliance or if there is a network communication problem
- Analyze automatically documented device events, such as when alarms are triggered, acknowledged or there are device communication problems
- Schedule transfers of Vaisala Veriteq device data (also referred to as ‘historical data’) to be viewed and graphed with the vLog software
- Easily identify devices and the zones in which they operate
- Create preconfigured comments for alarm notifications
- Check readings and acknowledge alarms from your mobile device

When installed, the Vaisala Veriteq CMS is comprised of software components (including viewLinc), and hardware components (including devices, a PC with a supported Internet browser, and, depending on how you connect the devices to your PC, various cables, Vaisala Veriteq vNet or Digi networking devices).

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Logging in to viewLinc

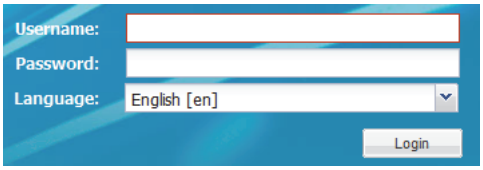
viewLinc allows you to:

- watch conditions (such as temperature and relative humidity) being recorded by devices and in the viewLinc historical database
- receive alarms if conditions are outside limits you set or if there is a communication problem

When you are ready to start using viewLinc, log in to viewLinc from a supported Internet browser.

To log in to viewLinc:

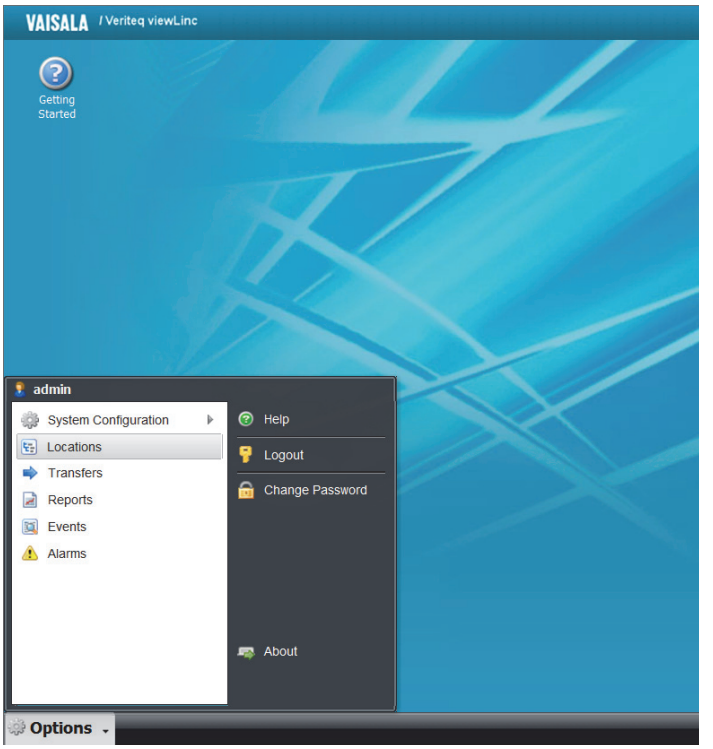
1. Double-click the desktop icon VA .
2. Or, in the address box of a supported Internet browser, enter the name or address of the machine where viewLinc is installed, and the port number. Your administrator will give you the correct address. For example, http://computername:portnumber or https://computername:portnumber if secure. (if no port number is specified, 443 is used by default). Save this address to your favorites or set as your homepage to easily access viewLinc from your browser.
3. In the login screen, first select your language from the language drop-down. When a new language is selected, the page will automatically refresh and update accordingly. This language setting will remain the same as long as the browser's cookies are kept.



Note: Ensure that your browser is not set to automatically delete cookies upon exit.

4 Enter your username and password. Click **Login**.

5 The main viewLinc screen appears, showing “Getting Started” screen. To start using viewLinc, click the Options button and choose Locations.



6 Here you will find a tree view with your location and device data. Expand the tree with the plus icon. If you don’t see any Location data, click a Location from the tree view, and select **Options | Refresh**. The selected Location’s data should appear.
If no Locations display, you may not have any Locations assigned to you, the administrator may need to configure the system, or there could be a problem with viewLinc itself. Speak to your administrator.

Note: The administrator may have set up the system to prompt for password periodically to ensure sys-

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tem security. When prompted, re-enter your password.

For more on locations, see ***Chapter 2: Locations***.

What's New in viewLinc

Locations: A Location is a 'data point' which can be linked to any channel and is located in a hierarchical tree of zones. The Locations feature replaces the previous channels/my channels functionality, providing improved customization and flexibility with more information available from the tree view.

Views: A View is a customized combination of locations selected from all available zones by the user. They offer the flexibility of navigating a tree view similar to the locations view with a customized hierarchical zone organization. They can be customized so a user can create a view of all location readings regardless of zone. These Views remain saved and allow each user to have the software set up in a way that better suits their role or job function.

Trends: Trends are custom graphs which can be built with user friendly drag and drop functionality. The trend view allows you to combine, contrast and compare location history in visual graphs using real-time data.

Dashboards: Dashboards provide the ability to upload a custom image for any zone or view and place locations on this image (for example a map or floor plan). They provide a customized display of the current readings at several locations at a glance.

Mobile Support: viewLinc 4.1 provides improved access from mobile devices, allowing you to perform key tasks from your smartphone or tablet. Apple iPhone iOS® 3+, Android® 2.1+, and BlackBerry® 6+ devices are supported.

Device Support: viewLinc 4.1 provides support and configuration options for all new compatible devices, including the Vaisala HUMICAP® Wireless Humidity and Temperature Transmitter HMT140.

Getting Help

If you need help, technical support is available:

North America

Contact Vaisala Canada Inc, 8am-4pm PST Monday - Friday, at 1-866-861-3388 (or 604-273-6850) or email veriteqsupport@vaisala.com. See also http://www.vaisala.com/en/lifescience.

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Chapter 2: Locations

This section is for administrators and general users.

In this section, you'll learn about:

- Locations, Trends, and Zones
- Selecting Channels and Zones to display as Locations
- Opening Large Popup Trend Views
- Viewing and Working with Real-time Graphs in a Large Popup Trend View
- Displaying or hiding Location information

Let's get started learning what locations are in viewLinc.

About Locations

What is a Location?

The Locations feature is new to viewLinc 4.1, giving the user improved customization with more information available more readily from the Location tree view. A Location is a 'data point' which can be linked to any single channel and can be located in a hierarchical tree of zones. It removes the hardware definition of host/device/channel from the Location tree, allowing any channel to become a Location. Depending on the type of Vaisala devices you have installed, a device may have up to five active channels and up to 27 definable channels available to measure readings such as temperature, relative humidity, voltage, pressure, current, etc. (one channel is used for each type of measurement).

Note: 300 Series Transmitters Output Quantities are displayed as Channels. (currently 27 possible types)

Using viewLinc, you can monitor any device that is connected to the network using Locations.

When you first log in to viewLinc, you can load the Locations function by clicking on the main screen **Options** button and selecting **Locations**. This window includes:

- zones and locations available for monitoring in an expandable tree view
- locations available for each selected zone
- table view which allows you to view and monitor data from zones and/or locations
- trend view which allows you to combine, contrast and compare location history in visual graphs with real-time data
- context-sensitive help

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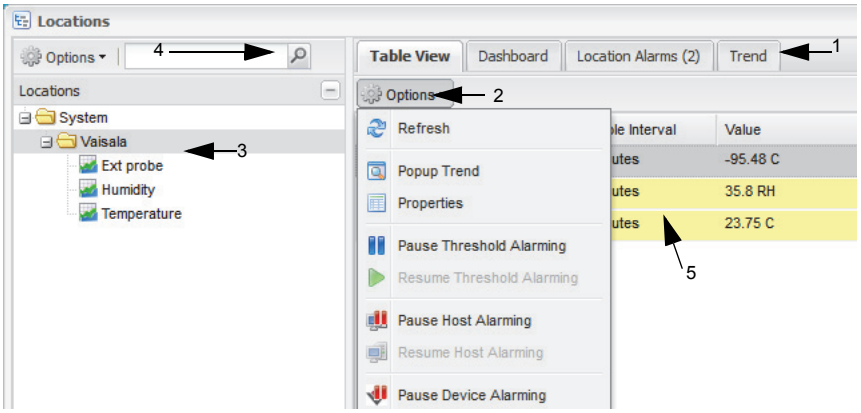
Understanding the Locations Screen

The Locations screen in viewLinc contains many important features:



Item	Details
1 - Tabs	Contains main viewLinc tabs: Table View, Dashboard, Location Alarms, Trend.
2 - Options dropdown	Contain buttons like Refresh, Popup Trend, Pause Alarming, etc. These menus are context-sensitive - they change depending on which tab is open and which item is selected within the tab.
3 - Zones area	Where configuration of locations and zones takes place. Use the locations tree to organize the locations that are connected to viewLinc into zones. Zones are represented by folders with Locations located below them in the tree. Locations are found below the zones. The table view on the right will display information about the zone or location that you have selected.
4 - Search	You can search for locations here by entering a search term in the text box and clicking the magnifying glass icon.

Table 1: Important features of the Locations screen

Item	Details
5 - Location Details	In Table View mode, includes details on channel configurations, paths, current data readings, latest timestamp and threshold information.

Table 1: Important features of the Locations screen

The Locations screen displays general information about the corresponding data source. When a location has no data source associated with it, it will be displayed with a blue exclamation mark icon. The Locations screen can also display views by clicking anywhere in the dark grey bar labelled “Views.” Views have the same functionality as locations, but are customized versions of the locations tree.

Each View can also have a Trend associated with it that is displayed in the Trend panel whenever a View is selected. A Trend is a historical view of Location data.

Most columns in the 4 tabs (Table View, Dashboard, Location Alarms, Trend) are easy to understand; however, here are their definitions to help you get familiar with viewLinc. To see all options, see “Hiding and Showing Location Columns” on page 36:

Column	Displays
Icon	The color coded icon associated with the location.
Location ID	Device description (can be edited from the System tab).
Device ID	The number associated with the device.
Location Path	The subfolders currently linked with the location. The top folder in the path will always be the default ‘System’.
Location Description	The description for the location that was entered at the time of creation.

Table 2: Columns of information in Locations

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Column	Displays
Device Serial Number	The serial number associated with the device.
Device Description	The description that was entered for the device at the time of configuration.
Channel ID	The system defined number associated with the channel.
Channel Number	Number representing the channel for that device (each device has 1 or more channels, and labels them 1, 2, and so on).
Channel Description	Description of channel (editable from the System tab).
Battery Status	The estimated battery level or if no battery, power method. Please note that any battery level readings are estimated readings and may not be precisely accurate.
Value	Reading of that channel, for example the temperature in Celsius.
Timestamp	Time that the last reading was taken.
Device Status	The current status of the device. Displays errors if the device is inactive.
Threshold Status	"OK" appears if there are no currently active alarms. Changes to indicate if a threshold alarm condition has been detected.
Threshold Summary	Summary of threshold status, if active.

Table 2: Columns of information in Locations

Understanding the Options Dropdown Menu in Locations

The **Options** dropdown menu in the left panel of Locations allows you to select commonly used commands. Some of

these commands will be available or greyed out depending on the location/zone you have selected, if any. You will also need the appropriate permissions to perform certain commands. If you don't have permission but think you should, speak to your administrator. The following options are available:

- **Refresh**: Reloads the selected tree.
- **Expand/Collapse All Zones**: Expands/collapses all zones and sub-zones of the tree in the left locations panel.
- **Pause Threshold Alarming**: Pauses the threshold alarms for the zone or location selected in the tree. If a zone is selected and there are child locations, this command will pause alarming on all child locations within the selected zone.
- **Resume Threshold Alarming**: Resumes threshold alarms in all data locations selected in the right panel. If a zone is selected and there are child locations, this command will resume alarming on all child locations within the selected zone.

Understanding The Tabs in Locations

The right panel in locations is a tabbed panel consisting of four tabs that are updated as the Locations tree is navigated. The four tabs are as follows:

- **Table View Tab**: Displays the location, device, threshold and status information for the currently selected location. Only locations that have channels assigned to them will be displayed.
- **Dashboard Tab**: Displays the dashboard for the current selected location or zone and sub-zones. Locations are displayed on the dashboard with their current reading. Zones are displayed as a folder icon and can be opened by double clicking this icon. Hovering over a zone or location will cause the mouse pointer to change and will display a tooltip with extra information.
- **Location Alarms Tab**: All active alarms for the current location or zone and sub-zones are shown under this tab. If acknowledgement is required on an Alarm, the alarm will be present in this window whether it is on or off. If

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acknowledgement is not required on an alarm, the alarm will be present in this window only if it is currently on.

- **Trend Tab**: When browsing the Locations tree, the trend tab enables you to build and display location trends quickly and save them as Views as follows.

Building a Trend with the Trend Tab

To create a custom trend using the trend tab:

1. Navigate the Locations tree to find a location you would like to graph in a trend.
2. Drag and drop one or several locations from the Locations tree onto the graph panel on the right.
3. Save the trend as a View by clicking the Options dropdown and selecting **Save as View**. The view will then become available in the views section and can be accessed any time. You can continue to build upon and modify your trend at any time by simply dragging more channels onto the graph and saving again.
4. Check and uncheck the 'Selected' column in the grid located in the Locations tab just below the graph. Click the live button or click **Options | Refresh** to refresh the graph and it will graph only the data you have selected with these checkboxes.
5. Plot threshold lines on a location by checking the 'Threshold Lines' column and refreshing again. The panel displays statistics information for each graph line.
6. Click on the **Group Statistics** tab to see the totals and max/min ranges for all locations together.
7. Click on the **Scale** tab to adjust the values for the scale of the graph. The default low/high range is set to auto. Clicking on this 'auto' text enables you to enter new values for the graph which will be applied when the graph is refreshed or the **Live** button is selected. There is a maximum of 16 locations (lines) per trend.
8. Click **Options | Save As Report** and specify a name for your report. The report will be available with the name you specified in the Reports section.

9 The trend tab also contains navigation controls which allow you to navigate historical data trends and refresh the view as necessary:

- Pressing on the forward and back arrows will adjust the start time accordingly, while pressing on the double forward and back arrows will adjust the start time by a greater distance.
- Pressing the live button will fetch the most recent data using the 'duration' combo box value to adjust the start date of the graph.
- The top right check box labelled 'Auto Refresh On' will toggle the auto refresh option. Uncheck it to stop periodic updates, or check it to have the same effect as pressing the live button.
- Navigating or zooming within the trend will automatically uncheck the "Auto Refresh On" option, because when you navigate within you are then viewing historical data. **See "Real-Time Graphs" on page 19.**

Understanding the Dropdown Menus and Buttons in the Locations Tabs

The four tabs in the Locations panel contain various options and control buttons to help you customize, manage and display data.

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Table View Tab Options

- **Refresh**: Reloads grid data with latest information.
- **Popup Trend**: Pops up the trend graph display of the selected row.
- **Properties**: Displays the properties window for the selected row.
- **Pause Threshold Alarming**: Pauses threshold alarming of the selected row.
- **Resume Threshold Alarming**: Resumes threshold alarming of the selected row.
- **Pause Host Alarming**: Pauses host device alarming for the selected host.
- **Resume Host Alarming**: Resumes host device alarming for the selected host.
- **Pause Device Alarming**: Pauses alarming on the selected device.
- **Resume Device Alarming**: Resumes alarming on the selected device.

Dashboard Tab Options

Contains only the **Refresh** option, which reloads data from the server when clicked.

Location Alarms Tab Options

- **Refresh**: Reloads data from server.
- **Print**: Prints the Active Alarms information. The Active alarm information will print, including all the details about the alarms by clicking this button.
- **Export the Active Alarms information to Excel**: All active alarm information can be exported to excel with the details about the alarms present under the Active Alarms tab. Clicking on the Export to Excel button asks the user to open or save the TSV file as shown.

  Note: TSV format is used because it is not affected by regional settings, unlike the CSV format.

Trend Tab Options

- **Refresh**: Reloads data from server.
- **Clear**: Clears all channels from the trend. This option is visible when building trends from the 'System view' tree.
- **Save as View…**: Displays a window to save the current trend as a View. This option is visible when building trends from the 'Locations' tree.
- **Save as Report…**: Displays a window to save the current trend as a single page 'History Report'.
- **Save**: Saves the current trend. This option is visible when browsing trends from the View tree.
- **Popup in New Window**: Pops up the trend in a new browser window. This option is visible when browsing trends from the View tree.
- **Include Realtime Samples**: When checked, this option will draw real time samples along with the logged data.
- **Show Data Markers**: When checked, this option will draw small markers on the trend, indicating exactly where the readings took place.Some of these options may be unavailable to you depending on the rights given to you by the system administrator. If you don't have permission to perform a function you need, speak to your administrator.

Opening Large Popup Trend Views

The Large Popup Trend window contains the most current data reading for the location, any related threshold settings, a graphical representation of recent historical data readings, and an area to indicate an active alarm.

Note: You can view a particular location's data reading in a single window, or you can open multiple location windows. If you use Internet Explorer, ensure your browser is set up to open new links in a new window or tab. Go to Tools | Internet Options, then, on the General tab in the Tabs section, click Settings and choose to open links from other programs in a new tab in the current window.

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To open a large popup trend view:

1. From the **Options | Locations** window, browse the locations tree and left click to select a location you want to view.
2. Right click **Popup Trend** or double click the selected location line. A new resizeable window containing information about the selected location appears.
3. Repeat steps 1 and 2 to view multiple large popup trend views. Many users choose to have multiple monitors displaying multiple trends by dragging each windows to various monitors as desired.

To close a large popup trend view, click the close box (x) in the top right corner of the window.

To acknowledge an alarm, see “Acknowledging Alarms” on page 27.

Real-Time Graphs

With viewLinc, you can view live data in graphical form at any time using the Trend tab in Locations.

To view live data as a graph:

1. From **Options | Locations**, click the **Trend** tab.
2. Expand the Locations tree on the left to find a Location you wish to graph. Drag locations as you wish from left to right (with a limit of 16 channels). The comparative data of all the Locations you selected will be displayed in the Trend tab.
3. Right click on a location and click **Popup Trend**. This opens the large trend view with both a graph and current value (for a single location only).

In this screen you can view the most recent historical trends, and hover over specific data points for more detailed readings.

Reading Graphs in Popup Trend View

When you open a location, you can see both a numerical and graphical representation of the device reading. Here is a description of the key elements in the graphing area:

Item	Description
Title bar	Displays the name of the Zone and type of location data reading (humidity, temperature, voltage or current).
Header bar	Indicates the date and time of latest reading; the time zone is based on the time zone setting of the PC running the browser. The graph header bar also displays the number of data points being measured.
Numerical display area	Displays most current data value in units being measured, as defined by the user.
Graph area	A graphical representation of data history is displayed here.
Left-side Y-axis	Shows the scale for the data displayed in the graph.
X-Axis time scale	Shows the reporting time frame (if you use Internet Explorer, you can only view the last 300 data points; all other browsers will show the last 1000 points).
Graph Line	Indicated by a line to show historical measurement readings based on a specific date or time frame. Move your mouse and hover over a specific point to show the specific X- and Y-axis values.

Table 3: Large Popup Trend view elements

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Item	Description
Threshold Line	Indicated by a color-coded line (based on threshold setting) to show historical threshold values. Move your mouse and hover over a specific point to show the specific X- and Y-axis values.
Active Alarms area	Displays active alarm details: Threshold value and amount exceeded; alarm date and time; whether the alarm was acknowledged, and by whom. Permits user to acknowledge an alarm. If you don't see the active alarm area, there may be no alarms to display. It can still be shown using the double arrows on the right hand side of the popup trend.
Status bar	Indicates channel monitoring status (OK or Alarm/Alarm condition type).

Table 3: Large Popup Trend view elements

Viewing Graph Detail in Large Popup Trend View

With a Large Popup Trend View open, you can also zoom in on a specific time period.

Simply click anywhere on the graph and drag your cursor to the right to highlight the time period you want to magnify, then release. The magnified area displays until the next live update. To return to full view immediately, double-click anywhere on the graph (or to zoom out, select an area, drag cursor to the left, then release).

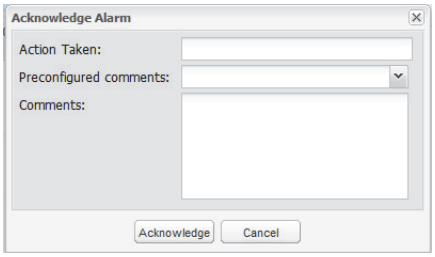
Acknowledging Alarms from Large Popup Trend View

From a Large Popup Trend View window, you can acknowledge alarms.

To acknowledge an alarm from a large popup trend view:

1 From the large popup trend view "Active Alarms" panel, click **Acknowledge**.

2 In the Acknowledge Alarm dialog box that appears, enter information to describe what was done to correct the alarm situation, or a general comment. You can also select from the dropdown of preconfigured comments if you prefer.



3 Click **Acknowledge**.

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Chapter 3: Alarms

Alarms and Alarm Acknowledgement are the keys to success with the Vaisala Veriteq Continuous Monitoring system.

In this chapter, you'll learn to:

- Understand Types of Alarms in viewLinc
- Create Alarm Templates
- Set threshold and Device Alarms
- Deactivate and Reactivate Alarms
- Acknowledge Alarms
- Pause Alarms

To learn about how to generate Alarm reports, see ***Chapter 5: Reports.***

Let's get started looking at alarms.

About Alarms

There are several types of alarms in viewLinc: threshold alarms, communication alarms, event log validation alarms, and device sampling alarms. If you are using validatable devices, you may also receive device validation alarms and calibration alarms.

Users with the appropriate ACL permissions can set threshold alarm limits and when conditions exceed these limits, alarms are triggered which notify key staff of the condition. Staff with Acknowledge Alarms permissions or higher then acknowledge the alarms in viewLinc.

All transactions are recorded in the Event Log and the Historical database.

Threshold Alarms

Threshold Alarms notify users when conditions (such as temperature and relative humidity) are outside acceptable limits.

Threshold alarms are not enabled by default. To trigger threshold alarms when certain thresholds are exceeded, users with assigned permissions must configure them.

Communication Alarms

Communication Alarms notify users when communication between a host (Device Host or viewLinc Server) and its devices is down. This may be because viewLinc Server can not communicate with the device, or the device connection to a host has been severed. Communication alarms serve as a system health test, alerting you if there is a problem that might disrupt viewLinc monitoring and alarming.

Event Log Validation Alarms

An Event Log Validation Alarm indicates when changes have been made to the event log from outside the viewLinc system. Each entry in the event log has its own CRC which is verified - if any changes have been made, an alarm is automatically created, rendering data non-validatable. It checks the CRC of event files, checks the CRC of event

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records in the files, checks for missing records, and checks for missing files. If any are discovered, an alarm is raised and must be acknowledged.

Device Configuration Alarms

If you receive a Configuration Alarm, this indicates that your device has stopped recording data history or was configured incorrectly. This could be the result of being set to stop when full, a delayed start, or the device could have an internal error. This alarm can also be triggered if a channel has been disabled in the device using vLog. To correct this issue, you can verify or modify the Vaisala Veriteq device settings using vLog. If the problem persists, contact your Vaisala technical support representative. The default delay for configuration alarms is 60 seconds. However this delay is bypassed for certain alarm types such as Missing Channel alarms, Configuration changes and Probe changes.

Device Validation Alarms

If you use a VL-type data logger, you'll receive a Validation alarm if the validation memory in the device is corrupted or has been modified. Contact your Vaisala technical support representative.

Device Calibration Alarms

If you use a VL-type device, Calibration Alarms send you intermittent notification when your device is due for calibration. You receive notifications at the following intervals: 3 months and 1 month before the calibration due date, then again on the data logger's scheduled recal date. This alarm will remain active until the logger has been recalibrated.

What Happens When an Alarm is Triggered?

When an alarm is triggered, several things can happen (depending on the configuration set by your administrator):

- A pop-up can appear showing a description of the condition, and an alarm message. If pop-ups are blocked

in your browser, an error message appears, prompting you to enable pop-ups for viewLinc.

- An email can be sent. If configured, emails are automatically sent to the address, addresses, or user specified when threshold limits are exceeded, communications are interrupted, or an event log or device alarm condition is present. Alarm emails can be sent repeatedly based on how alarm properties have been set.
- An application can be launched or an external device turned on. If configured, an external device (such as a light or buzzer) or a computer application (such as batch file which can page or phone a particular number) can be triggered when an alarm condition occurs.
- All of the above. Your administrator may also set up a tree alarm hierarchy, a method of notifying different individuals of an alarm if the first notification is not acknowledged within a specified time frame.

Alarms should be dealt with as soon as possible by acknowledging them in viewLinc. All transactions are recorded in the Event Log and Historical database and can be viewed in an Event Log or Alarm report.

1 You can also list all locations and devices that are currently using the selected template by clicking **Options | Devices and Locations using Template**. This shows all devices using the selected template and displays their zone/location and permissions information.

2 When you are finished creating your threshold template, click **Save.**

Threshold Alarms

Users with the correct permissions set device channel thresholds that trigger alarms. For example:

- Greater than 23.00 C for more than 1 minute
- Less than 37.76 RH for more than 15 minutes

You can set a threshold alarm using a template (if previously configured), or set a custom alarm.

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Acknowledging Alarms

All users can receive alarms, but only users with the correct permission can acknowledge alarms.

If an alarm is set to require alarm acknowledgement, alarms must be acknowledged. You must be logged in to viewLinc to acknowledge alarms.

Acknowledgement information, such as the action taken and any comments, is tracked in the Event Log and Historical database. For more information, see ***Chapter 4: Events*** and ***Chapter 5: Reports***.

When an alarm is triggered, a new row appears in the location alarms tab.

This section covers acknowledging alarms using the location alarms tab. You can also acknowledge alarms from

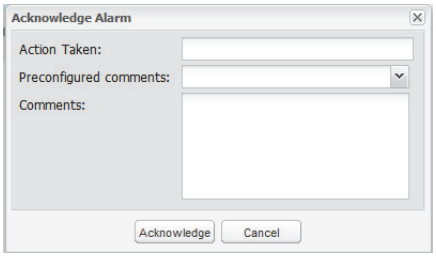
the "Alarms" form (**Options | Alarms**) or from a large popup trend view (see "Acknowledging Alarms from Large Popup Trend View" on page 21).

To acknowledge alarms from the location alarms tab:

1 From **Options | Locations**, select a location or zone. Click on the Location Alarms tab, select the active alarm, then right click and select **Acknowledge**.

Note: The number after the location name (i.e. Temperature (15494) is the unique location ID. In case the locations have been given the same name, this number provides a unique ID so you can differentiate between them.

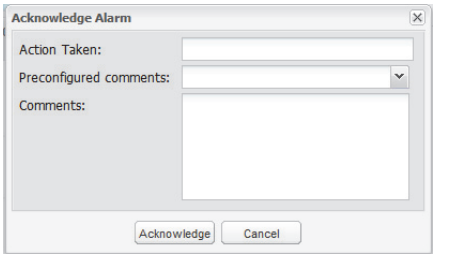
2 The Acknowledge Alarm dialog box appears, prompting you to enter actions taken and comments.



3 Click **Acknowledge**. Your comments and actions are added to the Event log and the Acknowledge Alarm box closes. Locations are updated with this change in status.

To acknowledge alarms from the alarms list:

1. Click **Options | Alarms** to view the list of active alarms.
2. Select the Alarm you wish to acknowledge. If you wish to acknowledge multiple alarms, you can hold the **[Ctrl]** or **[Shift]** buttons and click to multiple select then right click and select **Acknowledge**, or click the Options dropdown and select **Acknowledge**. You may wish to uncheck the "Auto Refresh On" checkbox when multiple selecting as the auto refreshing can delay the selection process.
3. If you wish to acknowledge all active alarms, you can use the **Options** dropdown and select **Acknowledge All "Off" Alarms**. Multiple selecting is not required in this case.
4. The Acknowledge Alarm dialog box appears, prompting you to enter the actions taken and comments.



5. Click **Acknowledge**. Your comments and actions are added to the Event log and the Acknowledge Alarm box closes. Locations are updated with this change in status.

Pausing Alarms

You may want to pause alarms if you need to move devices, or if a certain known situation may result in conditions exceeding set thresholds. Pausing alarms is faster than disabling alarms for a temporary period. You can pause an alarm for up to 24 hours.

To pause all alarms in a zone:

- Select **Options | Alarms**. This list will automatically refresh with the most current alarms as long as the Auto Refresh checkbox remains checked. You can select the attributes that will be available for viewing in this panel by clicking the down arrow next to any column heading and

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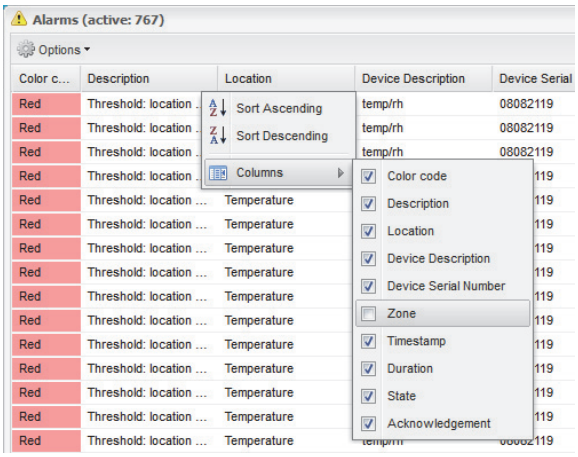
toggling the checkbox beside the item. The column can



then be sorted by clicking on the column header to group the respective column items together.

Exporting alarms to Excel format:

- Click the **Options** dropdown and select **Export to Excel**. This will export all alarms in this list to a .tsv format file. When prompted, save or open this file from your browser.

To print all active alarms:

- Click the **Options** dropdown and select **Print.** A new browser tab will appear with a printer-friendly list of alarms and the print dialog will pop up. Choose your desired print settings and print the document.

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Chapter 4: Events

All events - such as alarms, transfers of data from the device, alarm acknowledgements, system configuration changes and general system notifications - are tracked in viewLinc's Event Log under **Options | Events**.

The data tracked in Events is different from the data tracked in a device. Where the viewLinc Event Log tracks events occurring within the viewLinc system (such as notification of successful transfer of data from a device to a stored local directory), the device itself tracks the changes in temperature, relative humidity or voltage.

To ensure viewLinc continuously monitors and stores event history, event log validation alarms notify you when the viewLinc event log has been modified. For more about event log validation alarms, see ***Chapter 3: Alarms***.

Use the Events function to analyze events and determine when and where particular problems occurred, or to diagnose a situation that needs troubleshooting.

In this section, you'll learn to:

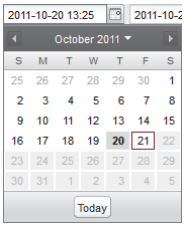
- View events
- Add comments to events
- Print event logs
- Export and save event log data into .tsv format

Viewing Events

Events are viewed in an Event Log, a text-based listing of all system events occurring with the devices on your system.

To view Events:

1. From viewLinc, select **Options | Events**. The Event Log appears, displaying a list of events, and, if available, comments on the event in the Event Details area to the right of the event listing.
2. Using the date and time selectors, choose the period for which you want to see events. Enter a date (using format MM/DD/YYYY HH:MM) or use the calendar button to specify a date range.



3. Using the buttons to the right of the date and time selectors, select or deselect buttons to see specific types of event details. After selecting an event type button to filter your results, select **Options | Refresh** to refresh the list. The more buttons you deselect, the shorter the list will be. You can choose to view:
   - **Alarm Events.** A list of alarms that were triggered during the specified time period.
   - **Admin Events.** A list of administrator actions taken, such as new alarm threshold settings.
   - **Transfer Events.** List of device data transfers performed during the specified time period.
   - **System Events**. List of changes to configuration options or any failed attempts to communicate between viewLinc Servers and devices.
4. Filter the results by clicking on the Filters dropdown in the upper right corner. You can select or unselect different event types (Alarm, Admin, Transfer and System Events) by toggling the checkboxes associated

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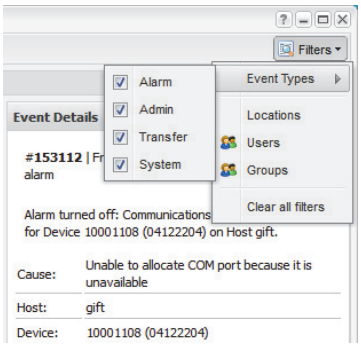
with them. You can also filter by specific users, groups or



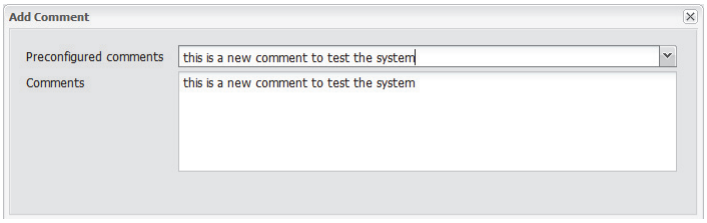
locations by clicking accordingly then checking or unchecking the checkboxes for the desired users, groups or locations. Select **Options | Refresh** to refresh the list or click outside of the filters window and the list will refresh automatically.

Adding Comments to Events

You may want to add comments to the Event Log, perhaps to outline why an event occurred or what was done in response to an event or problem.

To add a comment to the Event Log:

1. From viewLinc, select **Options | Events**.
2. Highlight the row (event) to add the comment to, and select **Options | Add Comment.** The Add Custom Comments to Event screen appears.


Add Comment
Preconfigured comments
this is a new comment to test the system
Comments
this is a new comment to test the system

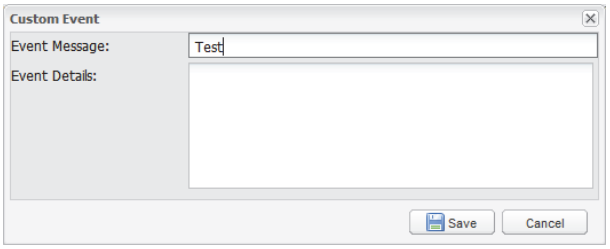
3. Enter your comment, then click **Save**.
4. To view a comment for a particular event, highlight the row containing that event and look for the comment in the Event Details area.

Adding Custom Events

You may want to add comments to the Event Log, perhaps to outline why an event occurred or what was done in response to an event or problem.

To add a custom event:

1. From viewLinc, select **Options | Events**.
2. From the events window, select **Options | Add Custom Event.**
3. Fill in the custom event message and details, then press **Save.**



Printing Event Logs

To print the event log:

1. From viewLinc, select **Options | Events**.
2. Choose the date and time range you are interested in printing. In the date/time box, enter a date and/or time in 24-hour notation, or click the calendar icons to make your selection.
3. Using the buttons to the right of the date and time selector, choose to either include or not include Alarm Events, Admin Events, Transfer Events and/or System Events.
4. From the events window, select **Options | Refresh**.
5. From the events window, select **Options | Print**.

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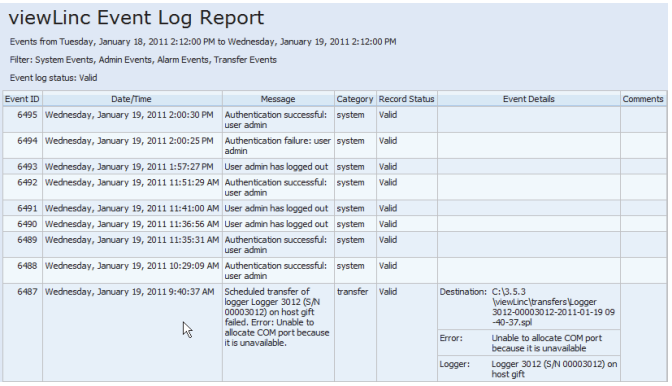
6 In a new browser window, a printer-friendly Event Log report opens.



viewLinc Event Log Report

Events from Tuesday, January 18, 2011 2:12:00 PM to Wednesday, January 19, 2011 2:12:00 PM

Filter: System Events, Admin Events, Alarm Events, Transfer Events

Event log status: Valid

Event ID	Date/Time	Message	Category	Record Status	Event Details	Comments
6495	Wednesday, January 19, 2011 2:00:30 PM	Authentication successful: user admin	system	Valid		
6494	Wednesday, January 19, 2011 2:00:25 PM	Authentication failure: user admin	system	Valid		
6493	Wednesday, January 19, 2011 1:57:27 PM	User admin has logged out	system	Valid		
6492	Wednesday, January 19, 2011 11:51:29 AM	Authentication successful: user admin	system	Valid		
6491	Wednesday, January 19, 2011 11:41:00 AM	User admin has logged out	system	Valid		
6490	Wednesday, January 19, 2011 11:36:56 AM	User admin has logged out	system	Valid		
6489	Wednesday, January 19, 2011 11:35:31 AM	Authentication successful: user admin	system	Valid		
6488	Wednesday, January 19, 2011 10:29:09 AM	Authentication successful: user admin	system	Valid		
6487	Wednesday, January 19, 2011 9:40:37 AM	Scheduled transfer of logger Logger 3012 (S/N 00003012) on host gift failed. Error: Unable to allocate COM port because it is unavailable.	transfer	Valid	Destination: C:\3.5.3 \viewLinc\transfers\Logger 3012-00003012-2011-01-19 09 -40-37.spl Error: Unable to allocate COM port because it is unavailable Logger: Logger 3012 (S/N 00003012) on host gift	

7 The Print dialog box displays automatically allowing you to set your print parameters and print the Event Log.

Exporting Event Logs

With viewLinc you can export event log data into a saved .tsv file for analysis at a later date.

To export event logs:

1 In viewLinc, click **Options | Events** and choose the date range you are interested in exporting. In the date/time box, enter a date and/or time in 24-hour notation, or click the calendar icons to make your selection.

2 Click the **Filters** dropdown to the right of the date and time selector to choose different event types by checking or unchecking **Alarm, Admin, Transfer,** and/or **System Events**.

3 Click **Options** | **Refresh**.

4 Click **Options** | **Export to Excel**. A file download dialog opens, prompting you to open or save the events .tsv file (in Microsoft Excel format).

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Chapter 5: Reports

Using viewLinc, you can create graphs and reports to analyze changes in data over time based on the historical data collected by Vaisala devices.

In this section, you'll learn what historical data is and how to:

- Analyze historical data
- Generate historical data reports in graphical and tabular formats

About Reports

Vaisala devices have the ability to store large amounts of data inside them. Data is logged in frequencies from once every 10 seconds to once every 24 hours. To set this frequency (known as the *sample interval)* for Vaisala Veriteq devices, refer to your vLog product guide. To set the sample interval for 300 Series Transmitters refer to the specific Vaisala product guide.

With viewLinc you can monitor real-time conditions for devices over the network, analyze or graph changes in conditions over time, or compare conditions recorded by different devices. This analysis is performed using the Reports function.

Generating Historical Data Reports

viewLinc provides you with a set of graphical reports which can help you easily view trends in data readings or alarm monitoring statistics (such as alarm trigger frequency).

- **Alarm reports** provide an overview of alarm events over a period of time (events related to every alarm are grouped together and presented in a readable form).
- **Historical data reports** provide a detailed history of location values (presented in both graphical and tabular form).

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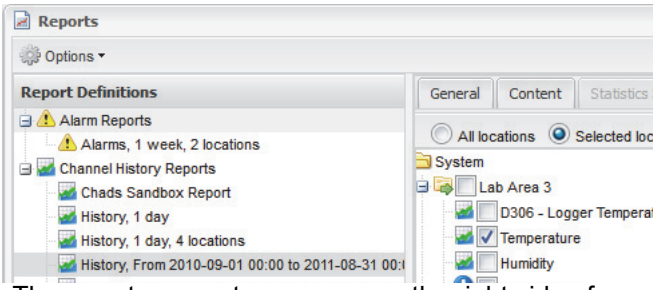
Generating Alarm History Reports

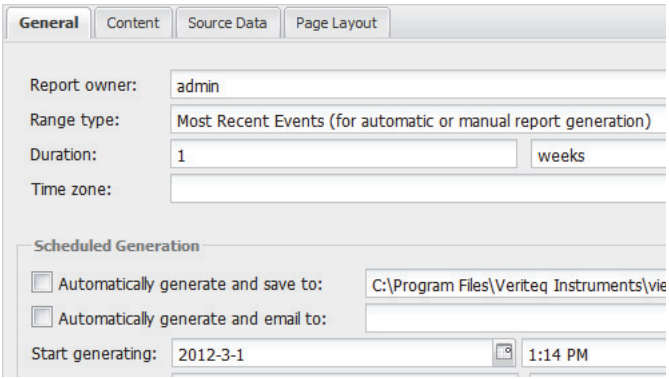
To generate an Alarm history report:

1 Select **Options | Reports** and left click to select the report you want to generate from the Report Definitions tree.



The report parameters appear on the right side of your screen (users can only view report parameters for the reports they generate, or reports to which they have been granted owner access).

2 Select an Alarm. On the General tab you can specify the period you want the report to include using the default option, **Most Recent Events**, or a specific date range. If you choose a fixed date range from the Range Type dropdown, calendars will appear to indicate from/to dates. The Time zone dropdown box enables you to specify a different time zone if necessary. Change this value only if a specific time zone adjustment is required for the report, otherwise leave it blank and it will report for your current time zone. If you do select a different time zone, all report dates, scheduled generation and printed timestamps will be relevant to the selected time zone.



3 In the Scheduled Generation area of the General tab, you can choose the format for your report (PDF or tab-

separate, for Excel), to automatically generate and save the report to a specific file location, or send the report to an email address or a list of addresses (use a comma to separate email addresses). You can also schedule when you want the report to generate, and how frequently you want it generated.

Note: For large report data sets, we recommend that you schedule report generation at a time when few users are using the system, such as after business hours.

4 On the Content tab determine whether you want a brief report (with one line for each alarm) or a detailed report (showing details about all alarm activities: activation, notifications, acknowledgement, etc.).

5 On the Source Data tab define the report scope. To include alarm report details from all locations, select **All Locations.** You can also select specific locations and zones:

- **a** Select the option, **Selected Locations and Zones**.
- **b** To select all locations in a zone, select the checkbox corresponding to the zone name from the locations tree.
- **c** To select a specific location in a zone, expand the tree to find the location, then select its checkbox.
- **d** Repeat these steps for each location you want to include on the report. All selected locations appear in the Selected region.

6 On the Page Layout tab define your report display options:

- **a** Page Header and/or Page Footer options: choose the pages on which you want a header or footer displayed. To define the header or footer, enter text in the Left, Center or Right fields.
- **b** Choose the type of paper you want to print on and the orientation.
- **c** You can also choose a customized icon in the left header section by clicking “Upload” or select from a list of provided icons by clicking the Image File dropdown.

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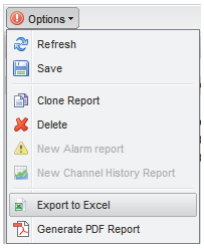
7 From the reports window, select **Save.**

8 To manually generate the report, choose either **Export to Excel** (which will generate a .tsv format file) or **Generate PDF Report** (which generates an Adobe format .pdf file) from the options dropdown. The exclamation point icon indicates when you have made changes that need to be saved.

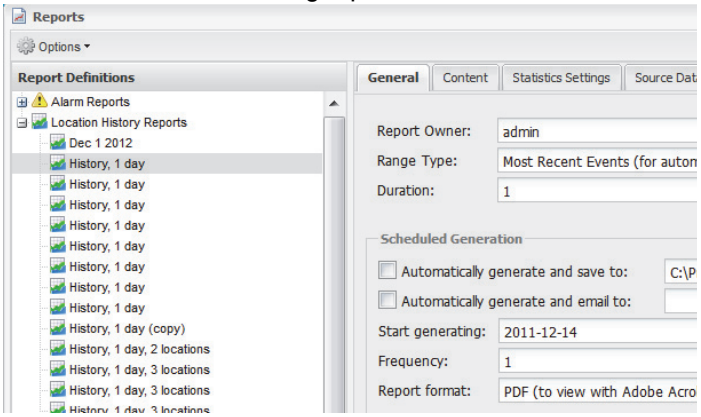


Generating Location History Reports

To generate a Location History report:

Note: viewLinc does not provide a default Location History report. Instead, the first time you generate a Location History report, the report is automatically saved.

1 Select **Options | Reports**. In the Report Definitions tree, select the report you want to generate from the Locations History Reports section. The report details will appear on the General tab in the right panel.



2. On the General tab, specify the user you want to have access to this report (if not already granted Full Control), and the range type data based on a specific date range, or the most recent data.
3. In the Scheduled Generation area, you can choose the format for your report (PDF or tab-separate, for Excel), to automatically generate and save the report to a specific file location, or send the report to an email address or a list of addresses (use a comma to separate email addresses). You can also schedule when you want the report to generate, and how frequently you want it generated.

   Note: For large report data sets, we recommend that you schedule report generation at a time when few users are using the system, such as after business hours.
4. On the Content tab identify the types of data you want included in the report, including Trend Graph, Title Page, Interval statistics graph (this allows you to change Statistic Settings in the Statistic Settings tab), and/or Tabular Data.
5. If you include the Interval Statistics graph, use the Statistics Settings tab to define how information will display on your report, and any statistical information you want to include:
   a. From Statistics Settings, select a statistics interval by checking the Include statistics at intervals checkbox if you want to intermittently generate statistics within the time frame of a report. For example, if your report generates data based on a seven day (weekly) interval, you may want to view statistics daily by selecting the Specify Duration radio box and specifying 1 day, 0 hours.
   b. In the Include area, select the types of statistical data you want to add to the report, including maximum value, average value, minimum value, standard deviation, sample count and mean kinetic temperature (MKT):
      - If you want to specify the activation energy, check Mean kinetic temperature and specify the activation energy as KJ/mol.

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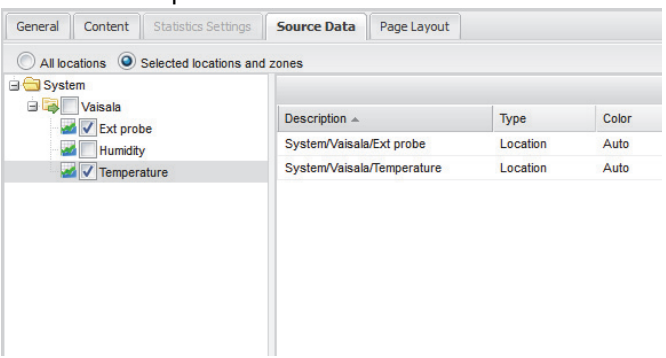
6 On the Source Data tab, define the report scope and color spectrum. To report on all locations, select **All Locations.** The screen will become greyed out to indicate that all are included. You can also select specific locations and zones:

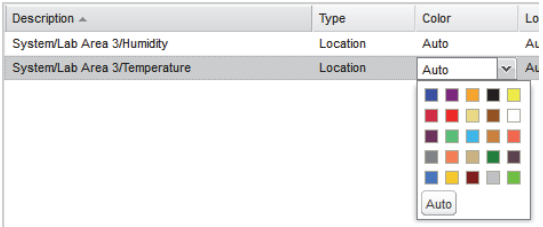
a Select the option **Selected Locations and Zones.**



b To select one or more locations in a zone, check the checkbox next to the zone or expand the zone and check the checkbox next to the location name.

c To add an index to the graph, select **Show Markers**.

d To specify a color to highlight a specific location's data, select the location, then select an option from the color dropdown. If you select Auto, viewLinc chooses a color according to the default color spectrum:



e When the location line colors are set to 'Auto' viewLinc assigns the next free color from a built-in palette of colors. Repeat for each location you want to include on the report. All selected locations appear in the Selected region.

7 Use the Page Layout tab to define the headers, footers, paper size and orientation:

   a For Header or Footer options, choose to display on all pages, on the first page only, on the last page only, or on the first and last page.

   b To define the content of your header or footer, enter text in the Left, Center or Right fields.

   c You can also choose the paper size you want to print on and the orientation (portrait or landscape).

   d Select a header image by using the Image File dropdown (for previously used images) or upload a new image file by clicking the **Upload** button and clicking **Browse** to locate the file.

   e Select **Options |** **Save.**

   f To manually generate the report, click the options dropdown and select **Generate PDF Report**.

8 Select **Options |** **Save.**

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Chapter 6: Mobile UI

This section is for administrators and general users.

In this section, you'll learn about:

- viewLinc 4.1's Mobile interface
- Performing key tasks from a mobile device

Let's get started learning about the Mobile interface in viewLinc.

About the Mobile UI

viewLinc 4.1 provides access from Mobile devices, allowing you to perform key tasks from your smartphone or tablet. The look and feel of the mobile application is similar to the main UI, however access is limited to certain key functions as follows:

- The Locations Panel
- Popup Trends
- Alarms and alarm comments.

The Mobile UI supports the following mobile devices:

Apple iOS 3+, Android 2.1+, and BlackBerry 6+ devices.

The Mobile UI is a tool to perform basic monitoring and maintenance tasks only, and does not support transfers, events, or reports. These features are only available in the main browser UI.

Logging in to the the Mobile UI

When you first load the mobile application, it will prompt you to enter a username/password. Enter the same username/password as used for the browser UI. You will also be able to select the language that will be displayed throughout your session from the dropdown box. When changing to a language other than English, the page automatically refreshes to display the new language.

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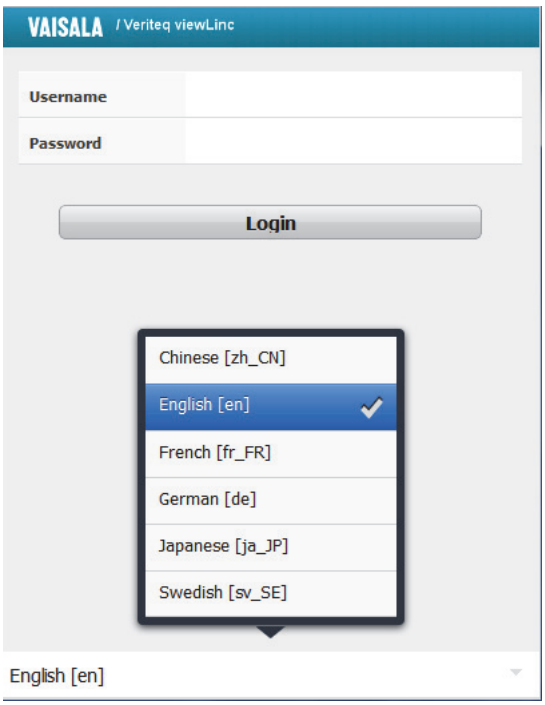
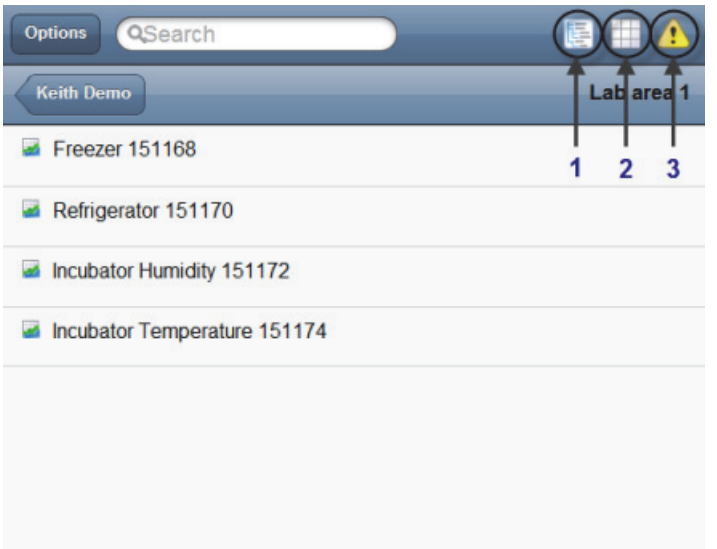


Working with the Mobile UI

The initial screen that appears after login is the system level of the locations tree. The tree is navigated by pressing any zone to reveal the locations below it, then pressing the top left **Options** menu to view the commands available.

There are 3 selectable views from the top right corner of the toolbar as follows.

Mobile views



1 **Locations Panel View:** The default view. When a folder item is pressed, the corresponding folder's contents will be displayed. To go up a folder, press the back arrow under the Options button at the top left. To get further information on a location, press to select it, then select **Options | Popup Trend**.

2 **Locations Table View:** This view will display detailed location information for whichever location was selected from the Locations Panel view. You can see extended location information by pressing to select a location, then pressing it again. Details such as device & threshold status, path, readings and timestamp will be displayed in an overlayed window.

3 **Alarm Grid View:** This view displays alarm information for whichever location was selected from the Locations Panel view. Only locations that have alarms assigned will be displayed. For example, if you are at the system level when you press the alarm grid, it will show you all alarms in the system, if any. To see complete detailed information, press on a specific alarm and it will be displayed in an overlayed window.

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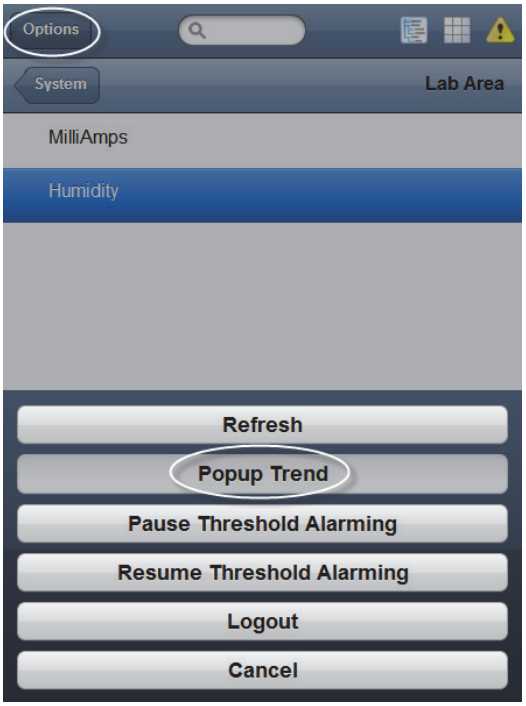
To view a popup trend using the mobile UI:

1 Press the **Locations Panel View** then navigate to the location by pressing on the zone containing it. Find the location and press to highlight it.

2 Press **Options | Popup Trend**



3 The Popup Trend window appears. This window is controlled using the same buttons and checkboxes as a traditional popup trend window. See “Opening Large Popup Trend Views” on page 18. Also see step 9 of “Building a Trend with the Trend Tab” on page 15 for how to use the blue arrow button controls.

To change popup trend graph settings using the mobile UI:

1 Press **Options | Popup Trend** with a location selected.

2 In the lower right corner of the popup trend, press **Options** then press on the checkboxes for **Realtime Samples or Threshold Lines**.

3 Press **Done**. The graph will automatically update to reflect your changes as long as the **Auto Refresh On** checkbox in the lower right corner remains checked.

Acknowledging Alarms with the Mobile UI

To acknowledge an alarm using the mobile UI:

1 Press the alarms button.

2 Highlight the alarm you'd like to acknowledge.

3 Press **Options | Acknowledge.**

4 A window appears prompting you to enter the action taken, preconfigured comments and extra user comments.

5 Fill in the required information and press **Acknowledge.**

Note: If the system setting 'Comments required on changes' is set to 'Comments are optional' via the main browser UI, then providing comments from the keyboard or selecting from the Preconfigured Comments dropdown is not necessary. In this case, the user can perform alarm acknowledgement with no comments.

To pause or resume alarming using the mobile UI:

1 Press the Locations view button.

2 Press a location to pause to pause or resume alarming for.

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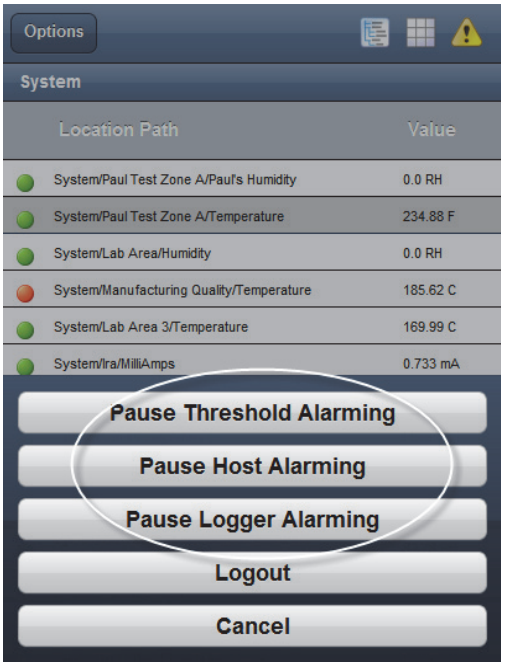
3 Press **Pause X Alarming** or **Resume X Alarming** (where **X** is the type of alarm you'd like to control.)



4 If you have paused alarming, it will remain paused until you resume it. To resume alarming, follow these steps again and select **Resume X Alarming**.

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Index

Numerics

300 Series Transmitters
    output quantities 10

A

acknowledge an alarm 21, 27, 28
active alarms
    viewing 21
adding comments
    to event logs 33
alarm trigger 26
alarms 23–27
    acknowledging 21, 27, 28
    active
        viewing 21
    communication 24
        pausing 28
    device 25
        configuration 25
    device calibration alarms
        defined 25
    devices 25
    email notifications 26
    multiple notifications 26
    pausing 28
    threshold 24
        multiple notifications 26
        pausing 28
    tree hierarchy 26
    validation 24
android devices
    supported 46
apple iOS 46
average value 42

B

blackberry devices
    supported 46

C

calibration alarms 25
channel description
    defined 13
channel number 13
color
    selecting for reports 43
comments
    adding to event logs 33
    viewing 33
communication alarms
    defined 24
    pausing 28
configuration alarms
    defined 25

D

device configuration alarms
    defined 25
devices
    calibration alarms 25
    configuration alarms 25

E

email notifications 26
event logs 31–35
    adding comments to 33
    adding custom events 34
    exporting 35
    printing 34
    saving 35
    viewing 32
    viewing comments 33
Excel reports 40, 41, 42
exporting
    event logs 35

G

graphs
- viewing 13, 14

H

historical data 2, 37
- purpose of 38
- viewing 13, 14

I

iPhone 46

L

launching applications or devices 26
locations
- opening 13, 14
- reading graphs 20
- screen 11

logger validation alarms
- defined 25

loggers
- validation alarms 25

login screen 3
logs, event. See event logs.

M

maximum value 42
mean kinetic temperature (MKT) 42
microsoft excel
- exporting logs to 35
- viewLinc event logs and 35

minimum value 42
mobile devices
- supported 46

Mobile UI 45, 46
- about 46
- acknowledge alarms with 50
- pause or resume alarming with 50
- working with 46

N

new in viewLinc 5
notifications
- calibration 25
- multiple 26

O

opening large popup trend view 13, 14
output quantities 10

P

passwords
- reconfirmation after session expiry 4

pausing alarms 28
PDF reports 39, 41, 42
popup trend views
- acknowledging alarms from 21
- opening 18
- reading 20
- viewing 21

pop-ups
- for alarms 25

R

reading
- threshold values 21

reading graphs
- in large popup trend view 20

real-time graphs 19
reports 37–44
- about 38
- alarm history 39
- color 43
- Excel 40, 41, 42
- generating 38, 39, 41
- locations history 41
- PDF 39, 41, 42
- types 38

S

sample count 42

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session expiry 4
spreadsheets, event log data in 35
standard deviation 42
statistics intervals 42
statistics settings 42
status bar, defined 13

T

tabs 11
threshold alarms
    defined 24
    multiple notifications 26
    pausing 28
threshold summary, defined 13
threshold values, reading 21
timestamp 13
transmitters
    output quantities 10

U

user accounts
    logging in 3
using color
    for reports 43

V

validation alarms
    defined 24, 25
viewing
    active alarms 21
    event comments 33
    locations 13, 14
viewLinc
    logging in 3
    security options 4

W

what's new 5

X

xls files 35

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